Course Information

Title: Statistical Computing
Course #: BANA5143-001, BANA6043-001
Credit Hours: 2
Term: Spring 2018 (First Half)

Instructor Information

Names: Matt Risley & Alex Schell
Email: rileymy@ucmail.uc.edu; schellar@mail.uc.edu
Office Hours: By Appointment
Communication Policy: Students are encouraged to contact us at any time via email. A response will be given within 48 hours except on weekends. Keep in mind that we also have day jobs. We also suggest contacting the TA or other avenues to resolve your questions.

Link to Pace

This course aligns with PACE, the Lindner College of Business platform for developing the *total* business professional.

P – Professionalism

- Enhance oral & written **communication**, express ideas clearly, logically and persuasively.
- Develop and practice **teamwork** skills through group projects and exercises.
- Practice professional habits of punctuality, preparation, respect and participation.

A – Academics

- Develop foundational knowledge of core **business functions** and their interactions within firms.
- Begin applying functional and cross-functional knowledge **to critically analyze business problems**; for example applying techniques for business plan development.

C – Character

- Learn and apply **leadership** techniques for project management (plan, brief, execute, debrief).
- Build an understanding and initial skills of **managing diversity**, including understanding cultural differences, and challenges and opportunities of global business.
- Understand importance of **ethics and social responsibility** in business and personal settings.

E – Engagement

- Build understanding of importance and practices of **networking** through interactions with business professionals and guest speakers.
- Develop awareness and appreciation of **involvement** in social organizations, community service, and professional group opportunities.

Course Materials

Optional
- *The Little SAS Book: A Primer* by Lora Delwiche and Susan Slaughter
- *R Cookbook* by Paul Teetor

Additional References:
- Google, Stack Overflow, etc.
- http://www.cookbook-r.com/
- https://support.sas.com/en/technical-support.html

Course Description

This course is intended to provide you with knowledge of R and SAS, two of the most widely used statistical softwares in the industry. This course will provide introductions to programming and performing simple statistical and data analyses in these languages. The course does not assume previous knowledge of R or SAS or familiarity with any programming languages. Students will be required to demonstrate growing proficiencies in the SAS and R languages as well as in common data manipulation and data analysis techniques.

Instructional Methods

The following course utilizes the Blackboard (Bb) Learning Management System to provide student-centered online learning that will enhance the teaching and learning process. Through a variety of instructional methods (e.g lectures, assessments, in- and out-of-class assignments, etc.), the learner will become immersed and engaged in the learning process. If you are not familiar with these tools, please visit https://kb.uc.edu/kbarticles/blackboard-landing.aspx.

Course Communication

University policy requires that the email set up in Blackboard is the primary means of communication. It is advisable that you use your UC email for this purpose and that you check it often. If you choose to change your email in Blackboard to a non-UC email it is your responsibility to ensure you check it frequently. Please see the attached Student Email Policy for more information:
http://www.uc.edu/content/dam/uc/infosec/docs/general/Policy_StudentEmail.pdf.

Course Policies

Course Structure

Changes to the syllabus, due dates, course requirements or grading requirements will be made as far in advance as possible. Due dates will be clearly marked in Blackboard and communicated in class. All assignments will be submitted via Blackboard.

Academic Integrity

As with all Lindner College of Business efforts, in this course you will be held to the highest ethical standards, critical to building character. Ensuring your integrity is vital and ultimately is your responsibility. To help ensure the alignments of incentives, the Lindner College of Business has implemented a "Two Strikes Policy" regarding Academic Integrity that supplements the UC Student Code of Conduct (see: http://www.uc.edu/conduct/Code_of_Conduct.html)

- All academic programs at the Lindner College of Business use this "Two Strikes Policy"; Any student who has been found responsible for two cases of academic misconduct may be dismissed from the College.
- All cases of academic misconduct (e.g., copying other students assignments, failure to adequately cite or reference, cheating, plagiarism, falsification, etc.) will be formally reported by faculty; and
- Students will be afforded due process for allegations as outlined in the policy.

Any instance or suspicion of academic misconduct will be reported to the Dean of the Lindner College of Business.

Disability

Students with disabilities who need academic accommodations or other specialized services while attending the University of Cincinnati will receive reasonable accommodations to meet their individual needs as well as advocacy assistance on disability-related issues. Students requiring special accommodation must register with the Disability Services Office. http://www.uc.edu/aess/disability.html

Counseling Services, Clifton Campus

Students have access to counseling and mental health care through the University Health Services (UHS), which can provide both psychotherapy and psychiatric services. In addition, Counseling and Psychological Services (CAPS) can provide professional counseling upon request; students may receive five free counseling sessions through CAPS without insurance. Students are encouraged to seek assistance for anxiety, depression, trauma/assault, adjustment to college life, interpersonal/relational difficulty, sexuality, family conflict, grief and loss, disordered eating and body image, alcohol and substance abuse, anger management, identity development and issues related to diversity, concerns associated with sexual orientation and spirituality concerns, as well as any other issue of concerns. After hours, students may call UHS at 513-556-2564 or CAPS Cares at 513-556-0648. For urgent physician consultation after-hours students may call 513-584-7777.

Title IX

Title IX is a federal civil rights law that prohibits discrimination on the basis of your actual or perceived sex, gender, gender identity, gender expression, or sexual orientation. Title IX also covers sexual violence, dating or domestic violence, and stalking. If you disclose a Title IX issue to me, I am required forward that information to the Title IX Office. They will follow up with you about how the University can take steps to address the impact on you and the community and

make you aware of your rights and resources. Their priority is to make sure you are safe and successful here. You are not required to talk with the Title IX Office. If you would like to make a report of sex or gender-based discrimination, harassment or violence, or if you would like to know more about your rights and resources on campus, you can consult the website www.uc.edu/titleix or contact the office at 556-3349.

Missed and/or Late Assignments and Assessments

Missing and/or late assignments and assessments are only permitted with 24 hour prior notice to the due date. If missing and/or late assignments become a chronic issue within the class, the instructors reserve the right to alter the policy on missing and/or late assignments and assessments.

Grading Policies

Your course grade will be determined by the following weighting system. The instructors reserve the right to alter the grading policy with advance notice to students.

Homework	40%
Assessments	15%
Midterm	20%
Final	25%

Your course grade, determined by the weighting schema above, will be scaled as follows:

A	93-100
A-	90-92
B+	87-89
B	84-86
B-	80-83
C	70-79
D	60-69
F	> 60

Course Schedule

The instructors reserve the right to alter the course schedule, as necessary.

Class	Topics	Reading	Deliverables
Week 2 (1/20)	-Getting Started with SAS -SAS Procedures	Delwiche, Chapter 3, 4 and 6	Homework #1
Week 3 (1/27)	-Data Visualization in R and SAS	Teetor, Chapter 10; Delwiche, Chapter 8 and 5	Homework #2, Assessment #1
Week 4 (2/3)	-Data Analysis in R and SAS	Teetor, Chapter 9; Delwiche, Chapter 9.1-9.9	Homework #3, Midterm
Week 5 (2/10)	-Linear Regression in R and SAS	Teetor, Chapter 11; Delwiche, Chapter 9.10-9.13	Homework #4, Assessment #2
Week 6 (2/17)	-R Functions -Loops in R and SAS -SAS Macros	Delwiche, Chapter 7	Homework #5
Week 7 (2/24)			Homework #6, Assessment #3, Final